



NOAA in Your Backyard – The Mid-Atlantic Region

Educational Opportunities and Education/Outreach Specialists for DC, DE, MD, NJ, VA, and Eastern NY, and Eastern PA

NOAA in Your State – State by State Listings of NOAA Facilities and Programs

- * A summary of NOAA facilities, staff, programs, or activities based in, or focused on, your state or territory.
 - http://www.legislative.noaa.gov/NIYS/

National Weather Service – School Visits, Forecast Office Tours, Student and Educator Resources

- * The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas.
 - Philadelphia Weather Forecast Office (Mount Holly, NJ) http://www.weather.gov/phi/outreach
 Contact: Joseph Miketta (Warning Coordination Meteorologist) joseph.miketta@noaa.gov
 - New York Weather Forecast Office (Upton, NY) http://www.weather.gov/okx/education
 Contact: Gary Conte (Warning Coordination Meteorologist) gary.conte@noaa.gov
 - Central Pennsylvania Weather Forecast Office (State College, PA) http://www.weather.gov/ctp/Outreach Contact: Peter Jung (Warning Coordination Meteorologist) peter.jung@noaa.gov
 - Roanoke Weather Forecast Office (Blacksburg, VA) http://www.weather.gov/rnk/OurOffice
 Contact: Phil Hysell (Warning Coordination Meteorologist) phil.hysell@noaa.gov
 - Baltimore/Washington Weather Forecast Office (Sterling, VA) http://www.weather.gov/lwx/
 Contact: Christopher Strong (Warning Coordination Meteorologist) christopher.strong@noaa.gov
 - Wakefield Weather Forecast Office (Wakefield, VA) http://www.weather.gov/akq/
 Contact: Bill Sammler (Warning Coordination Meteorologist) william.sammler@noaa.gov

National Estuarine Research Reserve System - Field Trips, Professional Development, Educator Resources

- * The National Estuarine Research Reserves System protects more than 1.3 million coastal and estuarine acres in 28 reserves located in 22 states and Puerto Rico for purposes of long-term research, environmental monitoring, education and stewardship.
 - National Website https://coast.noaa.gov/nerrs/
 - Delaware Reserve (DE) http://www.dnrec.delaware.gov/coastal/DNERR/Pages/DNERREducationTraining.aspx
 Contact: Maggie Pletta (Education Coordinator) margland.gov/waters/cbnerr/Pages/education.aspx
 Contact: Coreen Weilminster (Education Coordinator) cweilminster@dnr.state.md.us
 - Jacques Cousteau Reserve (NJ) http://jcnerr.org/education/
 Contact: Kaitlin Gannon (Education Coordinator) gannon@marine.rutgers.edu
 - Hudson River Reserve (NY) http://www.dec.ny.gov/lands/39663.html
 Contact: Chris Bowser (Education Coordinator) chris.bowser@dec.ny.gov
 - Chesapeake Bay Reserve (VA) http://www.vims.edu/cbnerr/education/index.php
 Contact: Sarah McGuire Nuss (Education Coordinator) mcguire@vims.edu

NOAA National Marine Sanctuaries - Field Trips, Professional Development, Educator Resources

*NOAA's 15 National Marine Sanctuaries serve as the trustee for the nation's system of marine protected areas, to conserve, protect, and enhance their biodiversity, ecological integrity and cultural legacy.

- National Website http://sanctuaries.noaa.gov/education/welcome.html
- Monitor Sanctuary (VA): http://monitor.noaa.gov/education/welcome.html
 Shannon Ricles (Education and Outreach Coordinator) Shannon.Ricles@noaa.gov



National Marine Fisheries in the Mid-Atlantic – Student Opportunities, Laboratory Facilities, NOAA Scientists

- * The NOAA Fisheries Service is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. They have regional offices and several smaller field offices.
 - National Website www.nmfs.noaa.gov/stories/2012/10/noaa fisheries education.html
 - Chesapeake Bay Office (Annapolis, MD) http://chesapeakebay.noaa.gov/education/educa
 - Greater Atlantic Regional Office (Gloucester, MA) –

https://www.greateratlantic.fisheries.noaa.gov/educational resources/bwet/

Contact: Colleen Coogan (Education and Outreach Specialist) - colleen.coogan@noaa.gov

Northeast Fisheries Science Center (Woods Hole, MA) – http://www.nefsc.noaa.gov

Contact: George Liles (Academic Programs) – George.Liles@noaa.gov

Contact: Genevieve Davis (classroom visits) - <u>Genevieve.Davis@noaa.gov</u>

National Sea Grant Program - Professional Development, Curriculum, Student and Educator Resources

*Sea Grant is a nationwide network of 33 university-based programs that conduct scientific research, education, training, and extension projects designed to foster science-based decisions about the use and conservation of our aquatic resources.

- National Website www.seagrant.noaa.gov/HowWeWork/Education.aspx and http://www.seagranted.net
- Delaware Sea Grant https://www.deseagrant.org/education

Contact: Christopher Petrone (Marine Education Specialist) - petrone@udel.edu

Maryland Sea Grant – http://www.mdsg.umd.edu/our-education-programs

Contact: Adam Frederick (Assistant Director for Education) - frederic@mdsg.umd.edu

New Jersey Sea Grant – http://njseagrant.org/education/

Contact: Diana Burich (K-12 Program Coordinator) - dburich@njseagrant.org

New York Sea Grant – http://www.seagrant.sunysb.edu/articles/t/focus-on-education

Contact: Amy Mandelbaum (Outreach Coordinator) - acb328@cornell.edu

Pennsylvania Sea Grant – https://seagrant.psu.edu/section/education

Contact: David B. Boughton (Maritime Education Specialist) - dbb11@psu.edu

Virginia Sea Grant – https://vaseagrant.org/outreach-education/

Contact: Lisa Ayers Lawrence (Marine Education Specialist) - ayers@vims.edu

Integrated Ocean Observing System (IOOS) - Curriculum, Real World Data, and Multimedia

- * The Mid-Atlantic Regional Association Coastal Ocean Observing System's (MARACOOS) mission is to seek, discover, share and apply new knowledge and understanding of our coastal ocean.
 - National Website https://ioos.noaa.gov/community/education/
 - MARACOOS (Newark, DE) http://maracoos.org/education

Contact: Peter Moore (Stakeholder Liaison) - moore@maracoos.org

Chesapeake Bay-Watershed Education and Training (B-WET) Program - Competitive Grants

- * B-WET is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment.
 - National Website http://www.noaa.gov/office-education/bwet
 - Chesapeake B-WET <a href="https://chesapeakebay.noaa.gov/bay-watershed-education-and-training-b-wet/bay-wat

Contact: Kevin Schabow (Chesapeake Bay Office) – kevin.schabow@noaa.gov

Geophysical Fluid Dynamics Laboratory (GFDL) - Tours and Student Internships on Climate Modeling

*Scientists at GFDL develop and use mathematical models and computer simulations to improve our understanding and prediction of the behavior of the atmosphere, the oceans, and climate..

Located in Princeton, NJ – http://www.gfdl.noaa.gov/for-students
 Contact: Maria Setzer (Lead, Communications and Outreach) – maria.setzer@noaa.gov



Cooperative Institute for Climate and Satellites - Maryland (CICS-MD) – Student Opportunities, ClimateBits Videos, Blogs

*CICS-MD performs collaborative research aimed at enhancing NOAA's ability to use satellite observations and Earth System models to advance the national climate mission, including monitoring, understanding, predicting and communicating information on climate variability and change.

Located in College Park, MD – http://cicsmd.umd.edu/outreach/
 Contact: Debra Baker (CICS-MD Coordinator) - dbaker@essic.umd.edu

National Ocean Science Bowl (NOSB) - Regional Competitions in the Ocean Sciences

* The NOSB is a national high school academic competition with regional competitions for student teams to test their knowledge of the marine sciences including biology, chemistry, physics, and geology.

- Chesapeake Bay Bowl (DC, DE, MD, PA, VA) http://www.chesapeakebaybowl.org
 Contact: Christopher Petrone (Region Coordinator) petrone@udel.edu
- Bay Scallop Bowl (NY) http://you.stonybrook.edu/bayscallopbowl/
 Contact: Bill Wise (Region Coordinator) william.Wise@stonybrook.edu
- Shore Bowl (NY, NJ, PA) http://coseenow.net/blog/2014/08/2015-shore-bowl/
 Contact: Carrie Ferraro (Region Coordinator) ferraro@marine.rutgers.edu
- Blue Crab Bowl (VA) http://web.vims.edu/BCB/
 Contact: Victoria Hill (Region Teams Coordinator) vhill@odu.edu or Carol Hopper Brill chopper@vims.edu

Centers for Ocean Science Education Excellence (COSEE) – Educator Workshops, Resources, Connect to Scientists

*COSEE is a network of over 270 institutional partners with the mission to spark and nurture collaborations among research scientists and educators to advance ocean discovery and make known the vital role of the ocean in our lives. (Most information is archived)

- National Website http://www.cosee.net/
- COSEE Coastal Trends (MD) *Legacy Site http://coseecoastaltrends.cosee.net/programs/foreducators/ Contact: Adam Frederick (MD Sea Grant - Assistant Director for Education) - frederic@mdsg.umd.edu
- COSEE NOW (Networked Ocean World) (NJ/National Network) http://coseenow.net/education-resources/ Contact: Carrie Ferraro (Project Coordinator) ferraro@marine.rutgers.edu

Local NOAA Vessels – Follow Current Science off the Atlantic Coast

- NOAA Teacher at Sea (follow teacher blogs onboard the ships) http://teacheratsea.noaa.gov/
- Marine Operations Center-Atlantic Fleet (Norfolk, VA) https://www.omao.noaa.gov/explore/facilities/marine-operations-center-atlantic-moc
- NOAA Ship Thomas Jefferson (Norfolk, VA) https://www.omao.noaa.gov/learn/marine-operations/ships/thomas-jefferson

Mid-Atlantic Data Resources – Historical and Real-Time Data

- Chesapeake Bay Recent Marine Data http://www.ndbc.noaa.gov/maps/Chesapeake Bay.shtml
- Middle Atlantic River Forecast Center http://www.weather.gov/marfc/
- Regional Climate Data (DC/Baltimore) http://www.weather.gov/climate/locations.php?wfo=lwx
- Tide Predictions Map http://tidesandcurrents.noaa.gov/gmap3/index.shtml?type=TidePredictions®ion=
- Chesapeake Bay PORTS (Physical Oceanographic Real-Time System) –

Southern Bay - http://tidesandcurrents.noaa.gov/ports/index.html?port=cs

Northern Bay - http://tidesandcurrents.noaa.gov/ports/index.html?port=cn

- Mid Atlantic Graphical Weather Forecasts http://graphical.weather.gov/sectors/midatlantic.php
- Real-time Oceanographic Data Map http://assets.maracoos.org
- Chesapeake Bay Sea Nettle Forecast Map http://www.opc.ncep.noaa.gov/Loops/SeaNettles/prob/SeaNettles.shtml
- Chesapeake Bay Interpretive Buoy System (CBIBS) http://buoybay.noaa.gov
- Atlantic Google Earth Overlays http://maracoos.org/google_earth
- NWS Blacksburg Fire Weather Briefing Page http://www.weather.gov/rnk/fire
- Regional Air Quality Forecast http://airnow.gov/index.cfm?action=airnow.local_state&stateid=48&mapcenter=0&tabs=0



Local Weather Events – Local Historical Weather Data

- New York City/ Tri-State Area Searchable Storm Event Database https://www.ncdc.noaa.gov/stormevents/
- Coastal Virginia Historical Weather Records http://www.weather.gov/climate/local_data.php?wfo=akq
- Philadelphia Area Weather Event Archive http://www.weather.gov/phi/archives
- Western VA Historical Weather Records http://www.weather.gov/climate/local_data.php?wfo=rnk
- Baltimore/Washington Historical Weather Records http://www.weather.gov/climate/local_data.php?wfo=lwx
- Hurricane Sandy http://www.weather.gov/okx/HurricaneSandy

NOAA Science On a Sphere® (SOS) Locations – Earth Systems Data Shown on a 6-foot Globe

- * SOS is a room-sized, global display system that uses computers and video projectors to display planetary data onto a six foot diameter sphere, analogous to a giant animated globe. It was developed by researchers at NOAA to help illustrate complex environmental processes (atmospheric storms, ocean currents, climate change, etc...) in a captivating way.
 - Smithsonian National Museum of Natural History (Washington, DC) http://www.mnh.si.edu
 - Smithsonian's National Zoo (Washington, DC) http://nationalzoo.si.edu
 - NOAA Center for Weather and Climate Prediction (College Park, MD)
 - Maryland Science Center (Baltimore, MD) http://www.mdsci.org
 - NASA Goddard Space Flight Center (Greenbelt, MD) http://www.nasa.gov/centers/goddard/visitor/home/index.html
 - NOAA Headquarters (Silver Spring, MD) http://www.noaa.gov/office-education/sosinssmc
 - James E. Richmond Science Center (Charles County, Waldorf, MD) http://www.ccboe.com/sciencecenter/
 - Nurture Nature Center (Easton, PA) http://nurturenaturecenter.org
 - Whitaker Center for Science and the Arts (Harrisburg, PA) http://www.whitakercenter.org
 - Danville Science Center (Danville, VA) http://www.dsc.smv.org
 - James Madison University (Harrisonburg, VA) http://www.jmu.edu/stewardship/tour/sphere.shtml
 - Nauticus National Maritime Center (Norfolk, VA) http://www.nauticus.org
 - Science Museum of Virginia (Richmond, VA) http://smv.org
 - NASA Wallops Flight Facility Visitor Center (Wallops Island, VA) http://www.nasa.gov/centers/wallops/visitorcenter/

